

Federal Communications Commission

# Telecommunications Glossary



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**The Federal Communications Commission ( FCC)** is working to make sure the nation's communications systems are working seamlessly and competitively in your best interest. This Telecommunications Glossary will help explain various technology terms to help you keep up with the rapidly evolving telecommunications industry. It contains telecommunications - related terms and acronyms which commonly appear in Commission documents and other publications or articles.



<b>Access Charge</b>	A fee charged to subscribers or other telephone companies by a local exchange carrier for the use of its local exchange networks. networks
<b>Analog Signal</b>	A signaling method that uses continuous changes in the amplitude or frequency of a radio transmission to convey information.
<b>Bandwidth</b>	The capacity of a line or channel to carry signals. The necessary bandwidth is the amount of spectrum required to transmit the signal with-out distortion or loss of information. FCC rules require suppression of he signal outside the band to prevent interference.
<b>Broadband</b>	A descriptive term for evolving digital technologies that provide consumers a signal switched facility offering integrated access to voice, high-speed data service, video-demand services, and interactive delivery services.
<b>Calling Party Pays</b>	A billing method in which a wireless phone caller pays only for making calls and not for receiving them.



Since 1983, the Commission has issued a series of decisions that have led to continued decreases in long distance rates.

<b>Cellular Radio</b>	A mobile system where a city is broken into “cells” and every cell is handled by one transceiver (receiver/transmitter).
<b>Closed Captioning</b>	A service for persons with hearing disabilities that displays television program dialogs of written words on the
<b>Closed Circuit TV</b>	A system in which a signal is transmitted from a point of origin to only those receivers who have previously arranged
<b>Commercial Leased Access</b>	Manner through which independent video producers can access cable capacity for a fee.
<b>Common Carrier</b>	A company that provides communications services to the general public.
<b>Communications Assistant</b>	A person who facilitates telephone conversations between text phone users, users of sign language or individuals with speech disabilities through a TRS. This service allows a person with hearing or speech disabilities to communicate with anyone else via telephone at no additional cost.

The background of the page is a blue-tinted photograph. In the foreground, a dark-colored laptop is open on a light-colored desk. To the left of the laptop, there is a small pink cup on a saucer. In the background, a person is standing and talking on a mobile phone. The overall scene is brightly lit, suggesting an office or home workspace.

**T**

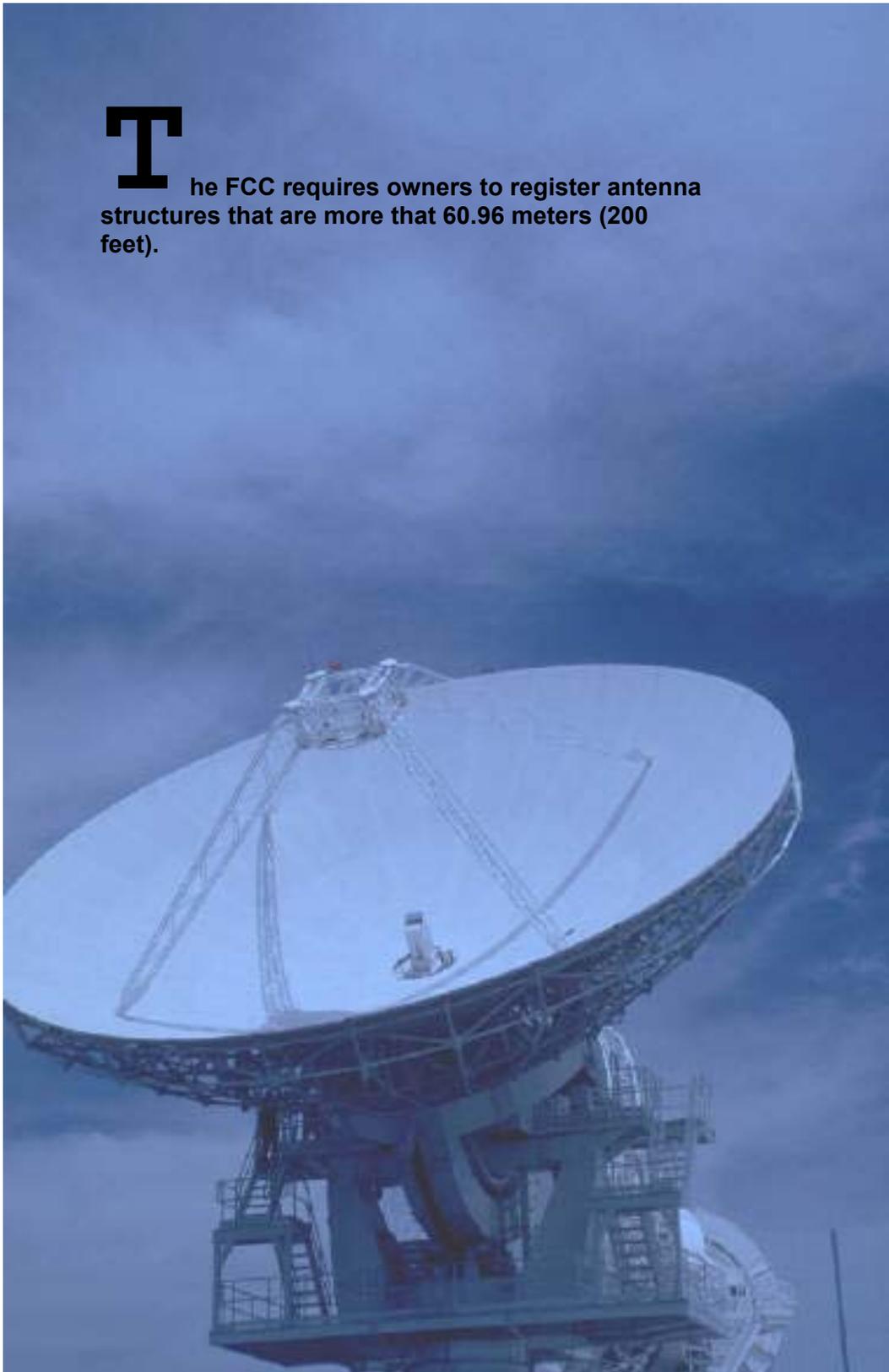
**he FCC wireless telecommunications programs and policies include:**

**cellular telephones,  
paging Personal Communications  
Service (PCS),  
public safety, and other commercial  
and private communications.**

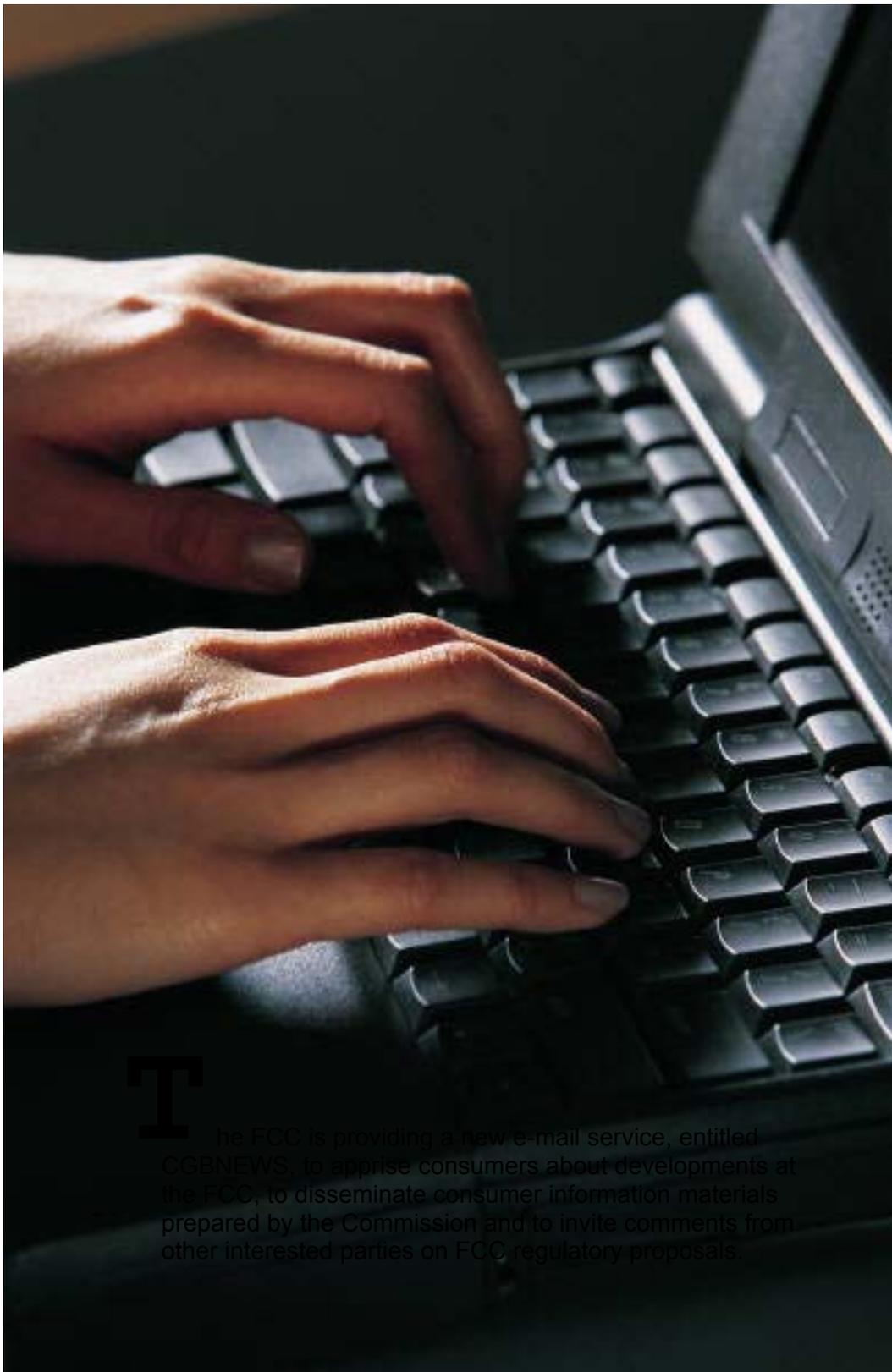
<b>Community Antenna Television (CATV)</b>	A service through which subscribers pay to have local television stations and additional programs brought into their homes from an antenna via a coaxial cable.
<b>Cramming</b>	A practice in which customers are billed for enhanced features such as voice mail, caller-ID and call-waiting that they have not ordered.
<b>Dial-Around</b>	Long distance services that require consumers to dial a long distance provider's access code (like a "10-10" number) before dialing a long distance number to bypass or "dial around" the consumer's chosen long distance carrier in order to get a better rate.
<b>Digital Television (DTV)</b>	A new technology for transmitting and receiving broadcast television signals. DTV provides clearer resolution and improved sound quality.
<b>Direct Broadcast Satellite (DBS)</b>	A high-powered satellite that transmits or retransmits signals which are intended for direct reception by subscribers. The signal is transmitted to a small earth station or dish (usually the size of an 18-inch pizza pan) mounted on homes or other buildings.

**T**

he FCC requires owners to register antenna structures that are more that 60.96 meters (200 feet).



<b>E-mail</b>	Also called electronic mail, e-mail is everything from simple messages flowing over a local area network (LAN) from one cubicle to another, to messages flowing across the globe
<b>Enhanced Service Providers</b>	A for-profit business that offers to transmit voice and data messages and simultaneously adds value to the messages it transmits. Examples include telephone answering services, alarm/security companies and transaction processing companies.
<b>En Banc</b>	An informal meeting held by the FCC to hear presentations on specific topics by diverse parties. The Commissioners, or other officials, question presenters and use their comments in considering FCC rules and policies on the subject matter that is under consideration.
<b>Frequency Modulation (FM)</b>	A signaling method that varies the carrier frequency in proportion to the amplitude of the modulating signal.
<b>Global Positioning System (GPS)</b>	A constellation of 24 satellites orbiting the earth used for navigation. The satellites provide a network to pinpoint your location.



**T**

he FCC is providing a new e-mail service, entitled CGBNEWS, to apprise consumers about developments at the FCC, to disseminate consumer information materials prepared by the Commission and to invite comments from other interested parties on FCC regulatory proposals.

<b>High Definition Television (HDTV)</b>	An improved television system which provides approximately twice the vertical and horizontal resolution of existing television standards. It also provides audio quality approaching that of compact discs.
<b>Instructional Television Fixed Service (ITFS)</b>	A service provided by one or more fixed microwave stations operated by an educational organization and used to transmit instructional information to fixed locations.
<b>Interactive Video Data Service (IVDS)</b>	A communication system, operating over a short distance, that allows nearly instantaneous two-way responses by using a hand-held device at a fixed location. Viewer participation in game shows, distance learning and e-mail on computer networks are examples.
<b>Interference</b>	Unwanted electrical signals or noise causing degradation of reception on a communications circuit.
<b>Landline</b>	Traditional wired phone service.
<b>Land Mobile Service</b>	A public or private radio service providing two-way communication, paging and radio signaling.

**F**

CC licensed DTV (HDTV) transmissions can be passed through any U.S. cable system if the system has a 6 MHz channel available.



<b>Low Power FM Radio (LPFM)</b>	A broadcast service that permits the licensing of 50-100 watt FM radio stations within a service radius of up to 3.5 miles and 1-10 watt FM radio stations within a service radius of 1 to 2 miles.
<b>Low Power Television Service (LPTV)</b>	A broadcast service that permits program origination, subscription service or both via low powered television translators. LPTV service operates on a secondary basis to regular television stations. Transmitter output is limited to 1,000 watts for UHF stations, 10 watts for VHF stations, except when VHF operation is on an allocated channel when 100 watts may be used
<b>Must-Carry (Retransmission)</b>	The 1992 Cable Act requires a cable system to carry signals of both commercial and noncommercial television broadcast stations that are "local" to the area served by the cable system.
<b>Network</b>	Any connection of two or more computers and computer related things - terminals, printers, modems, etc. that enables them to communicate. Networks may also include transmission devices, servers, cables, routers and satellites.



**T**

he Low Power FM (LPFM) radio service was created by the Commission in January 2000.

<b>Number Portability</b>	A term used to describe the ability of individuals, businesses and organizations to retain their existing telephone number(s) when switching to a new service provider.
<b>Open Video Systems</b>	An alternative method to provide cable-like video service to subscribers.
<b>Operator Service Provider (OSP)</b>	A common carrier that provides services from public phones, including payphones and those in hotels/motels.
<b>Paging System</b>	A one-way mobile radio service where a user carries a small, lightweight miniature radio receiver capable of responding to coded signals. These devices, called “pagers,” emit an audible signal, vibrate or do both when activated by an incoming message.
<b>Personal Communications Services (PCS)</b>	Any of several types of wireless, voice and/or data communications systems, typically incorporating digital technology. PCS licenses are most often used to provide services similar to advanced cellular mobile or paging services.



**C**onsumers who make calls away from home should be aware that the long distance and local rates charged from payphones and phones in other public areas like hotels, motels, hospitals and

<b>Personal Communications Services (PCS) (cont'd.)</b>	<p>PCS can also be used to provide other wireless communications services, including services that allow people to place and receive communications while away from their home or office as well as wireless communications to homes, office buildings and other fixed locations.</p>
<b>Presubscribed Interexchange Carrier Charge</b>	<p>A term used for the charge the local exchange company assesses the long distance company when a consumer picks it as his or her long distance carrier.</p>
<b>Public Safety Answering Point (PSAP)</b>	<p>A generic term for the person or group of people who answer 911 emergency phone calls.</p>
<b>Roaming</b>	<p>The use of a wireless phone outside of the "home" service area defined by a service provider. Higher per-minute rates are usually charged for calls made or received while roaming. Long distance rates and a daily access fee may also apply.</p>
<b>Satellite</b>	<p>A radio relay station that orbits the earth. A complete satellite communications system also includes earth stations that communicate with each other via the satellite. The satellite receives a signal transmitted by an originating earth station and retransmits that signal to the destination earth station(s).</p>



**T**

he spectrum allocated to PCS is divided into three major categories:

- (1) broadband,
- (2) narrowband, and
- (3) unlicensed.

<b>Satellite Home Viewer Improvement Act of 1999 (SHVIA)</b>	<p>An Act modifying the Satellite Home Viewer Act of 1988, SHVIA permits satellite companies to provide local broadcast TV signals to all subscribers who reside in the local TV station's market. SHVIA also permits satellite companies to provide "distant" network broadcast stations to eligible satellite subscribers.</p>
<b>Satellite Master Antenna Television (SMATV)</b>	<p>A satellite dish system used to deliver signals to multiple dwelling units (<i>e.g.</i>, apartment buildings and trailer parks.)</p>
<b>Satellite Transmission</b>	<p>A form of transmission which sends signals to an orbiting satellite which receives them, amplifies them and returns those signals back to the earth. Satellite transmission provides great clarity but suffers from delay.</p>
<b>Scanner</b>	<p>A radio receiver that moves across a wide range of radio frequencies and allows audiences to listen to any of the frequencies.</p>
<b>Service Plan</b>	<p>The rate plan you select when choosing a wireless phone service. A service plan typically consists of a monthly base rate for access to the system and a fixed amount of minutes per month</p>



**T**

he FCC oversees policies, rules, procedures and FCC's standards for licensing and regulating satellite space and earth station facilities, both

<b>Service Provider</b>	Any company which provides service to anyone else, i.e. phone service, Internet service, etc.
<b>Slamming</b>	The term used to describe what occurs when a customer's long distance service is switched from one long distance company to another without the customer's permission. Such unauthorized switching violates FCC rules.
<b>Special Emergency Radio Service (SMATV)</b>	A private Land Mobile Radio Service employed by persons or organizations engaged in emergency medical and rescue service, health care, or similar activity.
<b>Spectrum</b>	The range of electromagnetic radio frequencies used in the transmission of radio, data, and video.
<b>Subscriber Line Charge (SLC)</b>	A monthly fee paid by telephone subscribers that is used to compensate the local telephone company for part of the cost of installation and maintenance of the telephone wire, poles and other facilities that link your home to the telephone network.
<b>Tariff</b>	The documents filed by a carrier describing their services and the payments to be charged for such services.



**M**

**embers of the public may contact individual carriers serving their area about service plans and rates or may contact a wireless dealer**

<b>Telecommunications Relay Service (TRS)</b>	A free service that enables people with TTYs, individuals who use sign language and people who have speech disabilities to use telecommunications services by having a third party transmit and translate the call.
<b>Telephony</b>	The word used to describe the science of transmitting voice over a telecommunications network.
<b>Teletype Machine (TTY)</b>	A type of machine that allows people with hearing or speech disabilities to communicate over the phone using a keyboard and a viewing screen. It is sometimes called a TDD.
<b>Television Receive Only Earth Station (TVRO)</b>	Earth station equipment that receives video signals from satellite or MDS type transmissions.
<b>Ultra High Frequency (UHF)</b>	The part of the radio spectrum from 300 to 3000 megahertz which includes TV channels 14-83, as well as many land mobile and satellite services.
<b>Unbundling</b>	The term used to describe the access provided by local exchange carriers so that other service providers can buy or lease portions of its network elements, such as interconnection loops, to serve subscribers.

**A**

s of October 1, 2001, our country began a new era of telephone access. That is the day that the familiar calling shortcuts of 911 and 411 were joined by 711- the new three digit number for access to all Telecommunications Relay Services (TRS).



<b>Universal Service</b>	A program that helps ensure that all consumers in the nation have access to quality telecommunications and information services at affordable rates. The program also makes support available to schools and libraries to receive access to telecommunications and Internet services
<b>Very High Frequency (VHF)</b>	The part of the radio spectrum from 30 to 300 megahertz, which includes TV Channels 2-13, the FM broadcast band and some marine, aviation and land mobile services.
<b>Video Description</b>	An audio narration for television viewers who are blind or visually disabled, which consists of verbal descriptions of key visual elements in a television program, such as settings and actions not reflected in the dialog. Narrations are inserted into the program's natural pauses, and are typically provided through the Secondary Audio Programming channel.
<b>Voice Carry Over (VCO)</b>	A reduced form of TRS where the person with the hearing disability speaks directly to the other end user.
<b>Voice Over Internet Protocol (VoIP)</b>	A technology that allows users to make telephone calls using a broadband Internet connection instead of a regular (or analog) phone line.
<b>Wireless Communications</b>	Any broadcast or transmission which can be received through microwave or radio frequencies without the use of a cable connection for reception.



**T**ogether, shipboard and land stations in the marine services are meant to serve the needs of the entire maritime community. The FCC regulates these services both for ships of U.S. registry that sail in international and foreign waters and for all marine activities in U.S. territory.

	<b>T</b> <b>elecommunications Acronyms</b>
<b>ADSL</b>	Asymmetric DSL
<b>AM</b>	Amplitude Modulation
<b>ASCII</b>	American Standard Code for Information Interexchange
<b>ATM</b>	Asynchronous Transfer Mode
<b>CARS</b>	Cable Television Relay Service
<b>CATV</b>	Community Antenna Television
<b>CCTV</b>	Closed Circuit TV
<b>CLEC</b>	Competitive Local Exchange Company
<b>COAX</b>	Coaxial Cable
<b>DAB</b>	Digital Audio Broadcasting
<b>DBS</b>	Direct Broadcast Satellite
<b>DSL</b>	Digital Subscriber Line

<b>DTMF</b>	Dual Tone Multi Frequency
<b>DTV</b>	Digital Television
<b>EAS</b>	Emergency Alert System
<b>E-Mail</b>	Electronic Mail
<b>FM</b>	Frequency Modulation
<b>FNPRM</b>	Further Notice of Proposed Rulemaking
<b>FTP</b>	File Transfer Protocol
<b>GETS</b>	Government Emergency Telecommunications Service
<b>GHz</b>	Gigahertz
<b>GPS</b>	Global Positioning System
<b>HDSL</b>	High Speed DSL
<b>HDTV</b>	High Definition Television
<b>HSD</b>	Home Satellite Dish

<b>HSPC</b>	Homeland Security Policy Council
<b>Hz</b>	Hertz
<b>ILEC</b>	Incumbent Local Exchange Carrier
<b>INTEL-SAT</b>	International Telecommunications Satellite Organization
<b>IOC</b>	Independent Operating Company
<b>IP</b>	Internet Protocol
<b>IRC</b>	International Record Carrier
<b>ISDN</b>	Integrated Services Digital Network
<b>ISP</b>	Internet Service Provider
<b>ITFS</b>	Instructional Television Fixed Service
<b>ITU</b>	International Telecommunications Union
<b>IVDS</b>	Interactive Video Data Service
<b>LAC</b>	Local Area Coverage
<b>LAN</b>	Local Area Network

<b>LDS</b>	Local Digital Switch
<b>LEC</b>	Local Exchange Carrier
<b>LMDS</b>	Local Multipoint Distribution Services
<b>LPFM</b>	Low Power Frequency Modulated Radio
<b>LPTV</b>	Low Power Television
<b>MAG</b>	Media Access Group
<b>MAS</b>	Multiple Address System
<b>MATV</b>	Master Antenna Television System
<b>MDS</b>	Multi-point Distribution Service
<b>MHz</b>	Megahertz
<b>MMDS</b>	Multi-channel Multipoint Distribution Service
<b>MSO</b>	Multiple System Operator
<b>MUD</b>	Multi-User Dimension
<b>NARUC</b>	National Association of Regulatory Utility Commissioners

<b>NOI</b>	Notice of Inquiry
<b>NPRM</b>	Notice of Proposed Rulemaking
<b>NTSC</b>	National Television Standards Committee
<b>OSP</b>	Operator Service Provider
<b>OVS</b>	Open Video System
<b>PC</b>	Personal Computer
<b>PCS</b>	Personal Communications Services
<b>PIC</b>	Primary Interexchange Carrier
<b>PICC</b> Charge	Prescribed Interexchange Carrier
<b>PN</b>	Public Notice
<b>PSAP</b>	Public Safety Answering Point
<b>PSC</b>	Public Service Commission
<b>PSTN</b>	Public Switched Telephone Network
<b>PUC</b>	Public Utilities Commission

<b>RF</b>	Radio Frequency
<b>R&amp;O</b>	Report & Order
<b>SHVIA</b>	Satellite Home Viewer Improvement Act
<b>SLC</b>	Subscriber Line Charge
<b>SMATV</b>	Satellite Master Antenna Television
<b>SMR</b>	Specialized Mobile Radio Service
<b>STV</b>	Subscription Television
<b>SYNDEX</b>	Syndicated Exclusivity Rule
<b>TCPA</b>	Telecommunications Consumers Protection Act
<b>TDD</b>	Telecommunications Device for the Deaf
<b>TRS</b>	Telecommunications Relay Service
<b>TTY</b>	Teletype
<b>TVRO</b>	Television Receive Only Earth Station
<b>TWX</b>	Teletypewriter Exchange Service

<b>UHF</b>	Ultra High Frequency
<b>VAN</b>	Value Added Network
<b>VCO</b>	Voice Carry Over
<b>VHF</b>	Very High Frequency
<b>VoIP</b>	Voice over Internet Protocol
<b>WAN</b>	Wide Area Network
<b>WATS</b>	Wide Area Telecommunications Service
<b>WATTS</b>	Wide Area Telecommunications/ Television Service
<b>WRC</b>	World Radiocommunication

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The logo for the Consumer & Governmental Affairs (CGA) publication. It features a blue square with the letters 'CGA' in white, bold, sans-serif font. The logo is positioned over a background image of a stack of coins.

**CGA**

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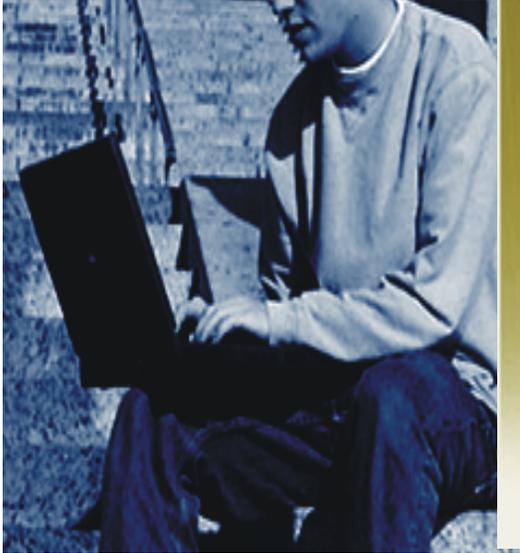
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